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NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Anura, Microhylidae, *Stereocyclops incrassatus* Cope, 1870: Distribution extension

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ABSTRACT: The microhylid frog *Stereocyclops incrassatus* occurs in humid forests of the eastern coast of Brazil south of the São Francisco River, in the states of Minas Gerais, Espírito Santo and Bahia. The present work reports this species in three Atlantic Rainforest fragments located in states of Alagoas and Pernambuco, northeastern Brazil, thus expanding the known distribution of Stereocyclops incrassatus *ca.* 1000 km northwards.

The neotropical Genus *Stereocyclops* Cope, 1870 (Microhylidae) is endemic to the Atlantic Rainforest Biome of eastern Brazil, occurring from eastern state of São Paulo (municipality of Ilhabela) to the southern portion of state of Bahia (Frost 2009). It currently contains only two species: *S. incrassatus* Cope, 1870 (type-species of the genus) and *S. parkeri* (Wettstein, 1934) (Frost 2009).

Stereocyclops incrassatus (Figure 1) occurs in the humid forests of the eastern coast of Brazil south of the São Francisco River, in the states of Minas Gerais, Espírito Santo and Bahia (Carvalho 1948; Feio *et al.* 1998; Albuquerque and Izecksohn 2001; Frost 2009). According to IUCN (2009), populations of this species are classified as ""declining". This nocturnal species is predominantly found on the forest floor leaf litter (IUCN 2009), is a generalist predator on arthropods (Teixeira *et al.* 2006), and its reproductive mode is classified as "Mode 1" (eggs and exotrophic tadpoles in lentic water) (Haddad and Prado 2005; IUCN 2009). This note documents an extension of the geographic distribution of this species.

The specimens of *S. incrassatus* reported herein were collected in three Atlantic Rainforest fragments, one located in the state of Alagoas and two in the state of Pernambuco, under license permits by Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), process #088/77 - RAN.

FIGURE 1. Male specimen of *Stereocyclops incrassatus* (CHBEZ555) obtained at Mata da Cachoeira, Usina Serra Grande, São José da Lage, state of Alagoas, northeastern Brazil. Photo by Eliza M. X. Freire.

In the State of Alagoas, six specimens were captured during the project "Herpetofauna of Forest Fragments", developed from February 2002 to January 2004. The specimens were obtained in July 2003 and January 2004, in the area of the Usina Serra Grande, at Mata da Cachoeira, municipality of São José da Lage (09°00' S, 36°03' W). This forest remnant of *ca.* 100 ha is one of a series of fragments isolated by sugarcane plantations, which together comprise about 4,000 ha of forest distributed in the municipalities of São José da Lage and Ibateguara (9°00' S, 35°51' W). One of the specimens was obtained during an active search, whereas the other five were caught with pitfall traps. All specimens were deposited in the Herpetological Collection of the Universidade Federal do Rio Grande do Norte - CHBEZ/UFRN (CHBEZ555 and CHBEZ759 - 763).

In the State of Pernambuco, the samplings were made in the Estação Ecológica do Tapacurá (EET) (08°03' S, 35°10' W), between May 2007 and November 2008 and in the forest complex of the Comando de Instrução Marechal Newton Cavalcanti (CIMNC) (07°50' S, 35°06' W) between June and November 2008.

The EET, located in the municipality of São Lourenço da Mata, has a total area of approximately 800 ha, of which about 400 ha represent forested areas, surrounded by sugarcane monoculture. It consists of three ombrophylous forest fragments: Camucim (200 ha), Alto da Buchada (100 ha) and Toró (100 ha). Five individuals of *S. incrassatus* were captured with pitfall traps in the Camucim fragment, and were deposited in the Herpetological Collection of the Universidade Federal do Rio Grande do Norte - CHBEZ/UFRN (CHBEZ2810 - 2814). The individuals were found between May and July 2008 (rainy season), a fact that is to be expected since most tropical frogs, especially those with explosive reproduction such as *S. incrassatus* and

other microhylids, tend to be found in greater numbers during the wetter period of the year (Bertoluci and Rodrigues 2002). The forest complex of the CIMNC is a large (*ca.* 7,000 ha) remnant of semi-ever green seasonal forest located in the municipalities of Araçoiaba, Paudalho and Tracunhaém. The sampling of *S. incrassatus* was done with pitfall traps, and the single specimen collected was also deposited in the aforementioned Herpetological Collection (CHBEZ2815).

The occurrences of *S. incrassatus* reported here are the first records of this species for the states of Pernambuco (Santos and Carnaval 2002) and Alagoas, and also for areas to the north of the São Francisco river, expanding its distribution *ca.* 1000 km northwards (Figure 2). The knowledge on the herpetofauna of northeastern Brazil north of the São Francisco river, which represents an ancient geographic barrier to dispersal of many terrestrial vertebrates (Rodrigues 2003), is still relatively limited, as can be evidenced by the growing number of descriptions of new species (*e.g.* Cruz *et al.* 1999; Peixoto *et al.* 2003; Carnaval and Peixoto 2004; Rodrigues and Santos 2008; Mott *et al.* 2009). The expansion of the area of occurrence of *S. incrassatus* gains importance as it is considered that its populations are declining (IUCN 2009), and it shows that the extent of its occurrence in the Atlantic forest of northeastern Brazil is underestimated.

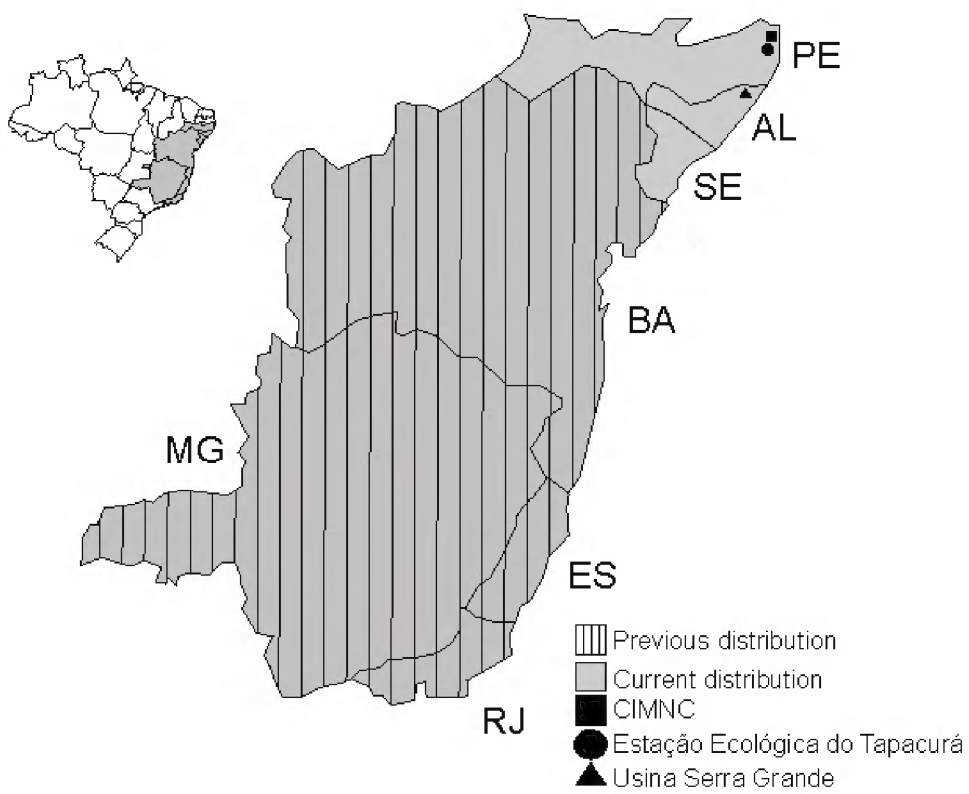

Figure 2. Map of Brazil evidencing the states of the original occurrence of the species *Stereocyclops incrassatus* Cope, 1870 (Amphibia Web 2009; Frost 2009; IUCN 2009) and the updated current distribution.

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